AMENDMENTS TO THE SPECIFICATION

Please **revise the paragraph beginning at page 7, line 23 of the specification** as follows:

The micro-antennas 2a, 2b, and 2c each include a plating layer 6 which is preferably made of a conductive metal and more preferably copper, gold, or platinum or which includes sublayers made of these metals. The thickness of the plating layer 6 is preferably at least two times greater than the depth (δ) below the surface ~~of a conductor~~ of the conductive metal at which a high-frequency current flows, the depth being represented by the following equation:

$$\delta=(2/(\omega\mu\sigma))^{1/2}$$

wherein σ represents the conductivity ~~of a~~ of the conductive metal, μ represents the magnetic permeability thereof, and ω represents the angular frequency of the high-frequency current. When the plating layer 6 is made of, for example, copper and the frequency of the high-frequency current is 100 MHz, the critical thickness of the plating layer 6 is about 100 μ M.

Please **revise the paragraph beginning at page 15, line 3 of the specification** as follows:

Fig. 4 is a schematic view of an apparatus for measuring the emission intensity of argon. Argon was introduced into a discharge tube 3 present in a substrate 1 through a pipe 8. A high-frequency wave with a frequency of 144 MHz was generated by varying an electric power using a high-frequency ~~power supply~~ electric current provided by a high voltage-

generating unit PU and a matching circuit and then applied to a micro-antenna, whereby plasma P was generated. The plasma P was measured for argon emission intensity with a spectrometer using an optical fiber 9. The emission intensity of the 763 nm line in the Ar I spectrum was measured at an argon flow rate of 0.7 slm at a position 2 mm distant from an end portion of the micro-antenna. Fig. 5 shows the relationship between the emission intensity of argon and the electric power applied to the plasma chips, manufactured in Manufacture Example 1 or 2, including the substrates made of different materials.